



Fugitive Dust Issues Resolved with MaxZone®

PROBLEM SUMMARY

A coal plant located in the southern United States encountered excessive spillage and fugitive dust challenges due to subpar equipment performance. The load zone skirting systems integrated with two conveyors in the rotary car dump building showed signs of extensive wear and aging.

Consequently, the skirting systems' operational effectiveness had significantly diminished, leading to the accumulation of substantial material piles. Furthermore, the dust emissions during material transfer posed serious safety concerns, compromising the overall working conditions.

BENETECH SOLUTION

Benetech conducted a comprehensive assessment, utilizing expertise in material handling systems and transfer point design. By leveraging this knowledge, operational efficiency was skillfully enhanced, presenting a practical and cost-effective resolution. Our load zone systems, infused with state-of-the-art technologies, embody products crafted from performance materials. These offerings are tailored to prioritize ease of service and maintenance, ensuring seamless functionality and longevity.

The experts at Benetech installed:

- **MaxZone® Load Zone System** — A belt enclosure system with easy-to-access, externally adjusted skirtboards; internal wear liners; dust curtains designed to disrupt air flow streams and prevent dust escaping the enclosure; and rubber skirting to prevent dust leakage along the sides of the conveyor.



IT PAYS TO IMPLEMENT BENETECH SOLUTIONS

- Minimized dust and spillage
- Reduced weekly clean-up time
- Significantly reduced maintenance time and cost
- Satisfied OSHA and federal regulations
- Minimized plant maintenance expenditures
- Reduction in plant Risk Profile based on excessive dust, spillage, and related frictional concerns

SUCCESSFUL RESULTS

The installation of a custom-fabricated MaxZone skirting system resulted in highly satisfactory outcomes, aligning with both Benetech's and the customer's expectations. These innovative solutions have substantially reduced maintenance demands by successfully mitigating material spillage. The implementation of effective sealing measures has effectively resolved the issue of excessive dust, further contributing to the improved operational environment.

By implementing comprehensive solutions, the plant now has a functional system that curbs spillage and dust-related problems. Benetech's diligent approach ensured enhanced efficiency and safety at the coal plant, aligning with the industry's best practices and standards.

BEFORE



AFTER



BEFORE



AFTER



+1 (800) 843-2625
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